

RECEIVED  
CENTRAL FAX CENTER

AUG 10 2007

REMARKS

A current and Non-final Office Action is dated 03/13/2007. In this current Office Action, claims 1-20 were examined. It is respectfully submitted that the current Office Action failed to examine the currently-pending claim set.

The parent Patent Application (09/707,132) was filed with claims 1-20 on November 6, 2000. It issued as U.S. Patent 6,725,393 on April 20, 2004.

The instant Continuation Patent Application was filed on February 20, 2004. It was filed with a Preliminary Amendment that canceled claims 1-20 and added new claims 21-41. Accordingly, it is respectfully submitted that new claims 21-41 should have been examined for the First Office Action on the merits.

Please find accompanying this Reply an Exhibit "A": a copy of the Preliminary Amendment. The Preliminary Amendment is thirteen (13) pages, and it includes the new claims 21-41.

Please find accompanying this Reply an Exhibit "B": a copy of the stamped Postcard that we received back from USPTO. The Postcard includes the following item: "5. Preliminary Amendment (Pages 1-13)". The USPTO stamp indicates a date of receipt of February 20, 2004, along with the Patent Application Transmittal and other filing documents.

For the reasons provided above, a new Non-final Office Action that properly reports an examination of claims 21-41 is hereby respectfully requested.

**RECEIVED**  
**CENTRAL FAX CENTER****AUG 10 2007****CONCLUSION**

It is respectfully submitted that all pending claims are believed to be allowable. Applicants therefore respectfully request allowance of claims 21-41 from the Preliminary Amendment.

Respectfully Submitted,

Dated: 8 Aug 2007

By: Keith W. Saunders  
Keith W. Saunders  
Reg. No. 41,462  
(509) 324-9256 x 238

Exhibit "A"

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Serial No. .... N/A  
Confirmation No. .... N/A  
5 Filing Date .... N/A  
Applicants..... Pellegrino, et al.  
Group Art Unit ..... 2184  
Examiner ..... Gabriel L. Chu.  
Attorney's Docket No. .... 200301878-2  
10 Title: SYSTEM AND METHOD FOR MANAGING DATA FLOW AND MEASURING  
SERVICE IN A STORAGE NETWORK

**PRELIMINARY AMENDMENT**

To: Commissioner of Patents and Trademarks  
P.O. Box 1450  
15 Alexandria, VA 22313-1450

From: Jed W. Caven  
Lee & Hayes, PLLC  
421 W. Riverside Avenue, Suite 500  
Spokane, WA 99201

20

**INTRODUCTORY COMMENTS**

Please amend the above-identified application in accordance the  
directions set forth below. The format of this communication is accordance  
with the Pre-OG press release titled "Amendments in a Revised Format Now  
25 Permitted" ("revised amendment format"), as set forth in the News and  
Notices section of the official website of the United States Patent and  
Trademark Office (PTO).

**AMENDMENTS TO THE DRAWINGS**

No Amendments to the drawings are made herein.

**AMENDMENTS TO THE SPECIFICATION**

Please amend the specification by adding at page 1, line 1, the following text:

**RELATED APPLICATIONS**

- 5           This application is a continuation of U.S. Patent Application Serial No. 09/707,132, filed November 6, 2000.

**AMENDMENTS TO THE CLAIMS**

Please cancel claims 1-20 without prejudice or disclaimer.

Please add new claims 21-41.

Following entry of these amendments claims 21-41 are pending in the  
5 present application.

21. (New) A method of managing a write request from a first source node  
in a storage network to a first storage node in the storage network,  
comprising:

10 if there is an available communication path between the first source  
node and the first storage node, then executing the write request from the  
first source node to the first storage node using the available communication  
path;

if there is not an available communication path between the first  
15 source node and the first storage node, then:

transmitting the write request from the first source node to a  
second source node if there is an available communication path from  
the first source node to the second source node and an available  
communication path from the second source node to the first storage  
20 node.

22. (New) The method of claim 21, wherein if executing the write request from the first source node to the first storage node generates a timeout failure, then:

5 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

10 23. (New) The method of claim 22, wherein transmitting the write request from the first source node to the second source node comprises encapsulating the write request.

24. (New) The method of claim 21, further comprising executing the write request from the second source node to the first storage node.

25. (New) The method of claim 24, further comprising transmitting an error message from the second source node to the first source node if the write request fails.

20

26. (New) A method of managing a write request from a first source node in a storage network to a mirrored storage data set having a first storage node and a second storage node in the storage network, comprising:

if there are available communication paths between the first source  
5 node and both the first storage node and the second storage node in the mirrored data set, then executing the write request from the first source node to both the first storage node and the second storage node using the available communication paths;

if there are no available communication paths between the first source  
10 node and the first storage node and the second storage node, then invoking an error routine;

if there is an available communication path between the first source node and only one of the first storage node and the second storage node in the mirrored data set, then:

15 executing the write request from the first storage node to the first storage node or the second storage node via the available communication path;

transmitting the write request from the first source node to a second source node if there is an available communication path from  
20 the first source node to the second source node and an available communication path from the second source node to the first storage node or the second storage node.



27. (New) The method of claim 26, wherein if executing the write request from the first source node to the first storage node generates a timeout failure, then:

5 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

10 28. (New) The method of claim 27, further comprising executing the write request from the second source node to the first storage node.

29. (New) The method of claim 26, wherein if executing the write request from the first source node to the second storage node generates a timeout failure, then:

15 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the second storage node.

20 30. (New) The method of claim 29, further comprising executing the write request from the second source node to the first storage node.

31. (New) A method of performing a surrogate write operation in a storage network, comprising:

receiving, at a second source node, a query from a first source node, wherein the query identifies a target node in the storage network for the surrogate write operation;

transmitting a reply to the first source node, wherein the reply includes a signal component indicating there is an available communication path between the second source node and the target node; and

relaying write operations from the first source node to the target node.

10

32. (New) The method of claim 31, further comprising determining whether there is an available communication path between the second source node and the target node.

15 33. (New) The method of claim 31, wherein relaying write operations from the source node to the target node comprises:

receiving an encapsulated write request from the first source node;

de-encapsulating the encapsulated write request; and

executing the write request from the second node to the target node.

20

34. (New) The method of claim 31, further comprising transmitting a failure signal from the second source node to the first source node if the write request from the second source node to the target node fails.

35. (New) One or more computer-readable media comprising logic instructions for managing a write request from a first source node in a storage network to a first storage node in the storage network, that, when executed by a processor, cause the processor to perform operations
- 5 comprising:
- executing a write request from the first source node to the first storage node using an available communication path between the first source node and the first storage node;
- if there is not an available communication path between the first
- 10 source node and the first storage node, then:
- transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage
- 15 node.

36. (New) The one or more computer-readable media of claim 35, further comprising logic instructions that, when executed by a processor, cause the processor to:

5       determine if executing the write request from the first source node to the first storage node generates a timeout failure, and if so, then to transmit the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

10

37. (New) The one or more computer-readable media of claim 36, further comprising logic instructions that, when executed by a processor, cause the processor to encapsulate the write request before transmitting the write request from the first source node to the second source node.

15

38. (New) One or more computer-readable media comprising logic instructions for performing a surrogate write operation in a storage network that, when executed by a processor, cause the processor to perform operations comprising:

5 receiving, at a second source node, a query from a first source node, wherein the query identifies a target node in the storage network for the surrogate write operation;

transmitting a reply to the first source node, wherein the reply includes a signal component indicating there is an available communication path

10 between the second source node and the target node; and

relaying write operations from the first source node to the target node.

39. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the  
15 processor to determine whether there is an available communication path between the second source node and the target node.

40. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the  
20 processor to perform operations comprising:

receiving an encapsulated write request from the first source node;

de-encapsulating the encapsulated write request; and

executing the write request from the second node to the target node.

41. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the processor to transmit a failure signal from the second source node to the first source node if the write request from the second source node to the target
- 5 node fails.

**RECEIVED  
CENTRAL FAX CENTER****AUG 10 2007****REMARKS**

Applicants respectfully request consideration and allowance of the  
subject application. Should any issue prevent issuance of the application,  
the Examiner is encouraged to contact the undersigned attorney to discuss  
5 the unresolved issue.

Respectfully Submitted,

10

Jed W. Caven  
Lee & Hayes, PLLC

Dated: \_\_\_\_\_

15

\_\_\_\_\_  
Name: Jed W. Caven  
Reg. No. 40,551  
Phone No. 303-539-0265 x 246

20

Direct correspondence to:  
Hewlett-Packard Company  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

# Exhibit "B"

200301878-2

Hewlett Packard, Fort Collins

2/20/2004

The stamp of the U.S. Patent and Trademark Office acknowledges receipt of the documents enumerated below, relating to the following application for letters patent:

Title: "System Machine and Method for Maintenance of Mirrored Datasets Through Surrogate Writes During Storage-Area Network Transients"

Inventorship: Pellegrino, et al

17510 U.S. PTO  
10/783865



1. Patent Application Transmittal
2. Copy of Executed Declaration (2 pages)
3. Continuing patent application (pages 1-19)
4. 4 sheets of formal drawings (Figs. 1-5)
5. Preliminary Amendment (Pages 1-13)
6. Copy of Assignment w/Recordation Cover Sheet (5 pages)
7. PTO Return Postcard Receipt (2)

EV395542311US

JWC/hac

LEE & HAYES, PLLC  
(509) 324-9256

47-78945C1